RF

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 22 1991

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

SUBJECT: ID #062719-00131: Trifluralin® in/on Rape: Amended registration (DP Barcode #D170791; CBTS #8833).

FROM: W. T. Chin, Ph.D., Chemist
Tolerance Petition Section III
Chemistry Branch Tolerance Support
Health Effects Division (H7509C)

W. T. Chin

THRU: P. V. Errico, Section Head
Tolerance Petition Section III
Chemistry Branch Tolerance Support
Health Effects Division (H7509C)

P. V. Errico

TO: Joanne Miller, PM #23
Herbicide & Fungicide Branch
Registration Division (H7505C)

Background

DowElanco has requested an amendment to the registered use of their herbicide, Treflan TR-10 (EPA Reg. #62719-131), for treatment of rape to control most annual grasses. The amendment calls for permitting a late summer or early fall application before planting.

Tolerances

Under 40 CFR 180.207, tolerances of 0.05 ppm were established for residues of the active ingredient trifluralin, α,α,α-trifluoro-2,6-dinitro-N,N-dipropyl-p-toluidine, in/on rape seed and rape straw. Tolerances are also established for numerous other rac's ranging from 0.05 to 1.0 ppm.

The Trifluralin Registration Standard is dated 7/3/85; and
The Trifluralin Product and Residue Chemistry Reregistration Standard Updates (CBRS's #8100 and 7205; Barcode #D157287 and #D159654) is dated 10/29/91.

Conclusions

1. The nature of trifluralin in/on rape is adequately understood. The residue of concern is trifluralin.

2. The existing trifluralin tolerances of 0.05 ppm in/on rape seed and rape straw are adequate to cover the proposed amended use.

3. Enforcement methods are available in PAM I and II.

4. The petitioner is requested to revise Section B by specifying the original restriction against feeding or grazing of treated rape forage on the amended label.

RECOMMENDATION

Pending resolution of Conclusion #4, CBTS has no objection to this amendment which would permit a late summer or early fall application of Treflan® TR-10 on rape at 5.0, 7.5 and 10.0 lbs (= 0.5, 0.75 and 1.0 lb a.i.)/A/crop for soils with coarse, medium and fine textures, respectively.

DETAILED CONSIDERATIONS

Registered Use On Rape

Treflan® EC (4 lbs a.i./gal of 44.5% technical trifluralin) was registered for use on rape to control annual broadleaf and grassy weeds in rape in late fall or early spring at a broadcast rate of 3/4 to 1.0 lb a.i./A/crop. The lower rate was recommended on lighter soil with coarse texture containing organic matter less than 6%; and the higher rate was recommended on soil with fine texture containing 6-15% organic matter. Incorporate the spray to a depth of 3 to 4 inches of soil within 8 hours after application. The petitioner also agreed to a restriction against the feeding or pasturing of treated rape forage (see P. V. Errico's 1/7/81 memo; PP#0E2394).

Proposed Amendment

The current proposal is to permit a late summer or early fall application to rape with Treflan® TR-10, 10% granules, at 5.0, 7.5 and 10.0 lbs (= 0.5, 0.75 and 1.0 lb a.i.)/A/crop for soils with coarse, medium and fine textures, respectively. No restriction on feeding or pasturing of treated forage is included.

By a telephone conversation on 11/19/91, the petitioner (Dr. D. H. Lade) indicated that the Treflan® EC formulation for use on rape and many other crops has been replaced by Treflan TR-10 for years without changing the residue patterns of trifluralin. Based on the information outlined in the following Residue Data section, CBTS concludes that this explanation is acceptable.

Residue Data

No new residue data are submitted to support this amendment. However, previously residue data indicated that no residue of trifluralin was detected in/on rape seed and straw at application rates of 0.75 to 4 lbs a.i./A (P. V. Errico's 1/7/81 memo).

The Trifluralin Product and Residue Chemistry Reregistration Standard Updates indicates that no additional residue data are required for the established 0.05 ppm tolerances for residues of trifluralin in/on rape seed and rape straw.

The recent field trials conducted with Treflan® 5EC on sugarcane indicated that at an exaggerated rate of 20 lbs a.i./A/crop, no finite residues of trifluralin were detected in sugarcane bagasse, molasses and sugar (W. L. Anthony's 7/22/91 memo).

Environmental Fate Branch has summarized: "Trifluralin does not accumulate in soil even after repeated yearly treatments. Trifluralin is not expected to leach or run off treated areas; it is readily volatilized and photodegraded. The environmental fate of treflan N-nitroso contaminant, NDPA, is also known and is not expected to persist in the environment." (R. V. Moraski's 10/5/81 letter to PM #43 filed in PP#0E2394).

Based on the above information, CBTS concludes that the residue pattern of trifluralin in/on rape seed and straw will not be affected by permitting a late summer or early fall application of Treflan® TR-10 to rape.

However, the petitioner is requested to revise Section B by specifying the original restriction against feeding or grazing of treated rape forage on the amended label.

cc: Circ, RF, PP#0E2394, SF(trifluralin) W.T.Chin, R.B.Quick, PIB/FOD

RDI: P.V.Errico(11/21/91), R.Loranger(11/21/91)
H709C: CBTS: CM#2, RM812, 557-4352, W.T.Chin,wc(11/22/91)